

SEQUENCE LISTING

5 SEQUENCE LISTING

<110> Colotech
Raskov, Hans Henrik
Albrethsen, Jacob
10 Gammeltoft, Steen
Bøgebo, Rikke Maria

<120> A method for detection of colorectal
cancers in human samples
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<130> P32733PC01

<140> PCT/DK04/000263
20 <141> 2004-04-07

<150> DKPA200300541
<151> 2003-04-08

25 <150> DKPA200301085
<151> 2003-07-16

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Ser Ser Ser Tyr Ser Lys Gln Phe Thr Ser Ser Thr Ser Tyr Asn Arg
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 20 25 30
 5 Gly Ser Glu Ala Asp His Glu Gly Thr His Ser Thr Lys Arg Gly His
 35 40 45
 Ala Lys Ser Arg Pro Val
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 Ala Glu Phe Pro Ser Arg Gly Lys Ser Ser Ser Tyr Ser Lys Gln Phe
 20 25 30
 25 Thr Ser Ser Thr Ser Tyr Asn Arg Gly Asp Ser Thr Phe Glu Ser Lys
 35 40 45
 Ser

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Ser Gly Ile Phe Thr Asn Thr Lys Glu Ser Ser Ser His His Pro Gly
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 20 25 30
 45 Phe Thr Ser Ser Thr Ser Tyr Asn Arg Gly Asp Ser Thr Phe Glu Ser
 35 40 45
 Lys

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 1 5 10 15
 5 His Pro Gly Ile Ala Glu Phe Pro Ser Arg Gly Lys Ser Ser Ser Tyr
 20 25 30
 Ser Lys Gln Phe Thr Ser Ser Thr Ser Tyr Asn Arg Gly Asp Ser Thr
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 55 Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr
 20 25 30
 Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr
 35 40 45
 Leu Phe Gly Asp Lys
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 Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
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 15 Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
 20 25 30
 Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
 35 40 45
 Phe Ala Lys
 20 50

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 Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg
 35 40 45

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 Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu
 20 25 30
 55 Val Lys His Lys Pro Lys
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 10 Tyr Val Met Leu Pro Val Ala Asp Gln Asp Gln Cys Ile Arg His Tyr
 1 5 10 15
 Glu Gly Ser Thr Val Pro Glu Lys Lys Thr Pro Lys Ser Pro Val Gly
 20 25 30
 Val Gln Pro Ile Leu Asn Glu His Thr Phe Cys Ala Gly Met Ser Lys
 15 35 40 45
 Tyr Gln Glu Asp Thr Cys Tyr Gly Asp Ala Gly Ser Ala Phe Ala Val
 50 55 60
 His Asp Leu Glu Glu Asp Thr Trp Tyr Ala Thr Gly Ile Leu Ser Phe
 65 70 75 80
 20 Asp Lys

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 35 Tyr Val Met Leu Pro Val Ala Asp Gln Asp Gln Cys Ile Arg His Tyr
 1 5 10 15
 Glu Gly Ser Thr Val Pro Glu Lys Lys Thr Pro Lys Ser Pro Val Gly
 20 25 30
 Val Gln Pro Ile Leu Asn Glu His Thr Phe Cys Ala Gly Met Ser Lys
 35 40 45
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 Leu Lys Gln Lys Val Ser Val Asn Glu Arg Val Met Pro Ile Cys Leu
 1 5 10 15
 Pro Ser Lys Asp Tyr Ala Glu Val Gly Arg
 55 20 25

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10	1	Leu	Pro	Pro	Asn	Val	Val	Glu	Glu	Ser	Ala	Arg	Ala	Ser	Val	Ser	Val
						5					10					15	
		Leu	Gly	Asp	Ile	Leu	Gly	Ser	Ala	Met	Gln	Asn	Thr	Gln	Asn	Leu	Leu
					20					25					30		
		Gln	Met	Pro	Tyr	Gly	Cys	Gly	Glu	Gln	Asn	Met	Val	Leu	Phe	Ala	Pro
				35				40						45			
15		Asn	Ile	Tyr	Val	Leu	Asp	Tyr	Leu	Asn	Glu	Thr	Gln	Gln	Leu	Thr	Pro
		50					55					60					
		Glu	Val	Lys	Ser	Lys	Ala	Ile	Gly	Tyr	Leu	Asn	Thr	Gly	Tyr	Gln	Arg
		65				70				75						80	
		Gln	Leu	Asn	Tyr	Lys	His	Tyr	Asp	Gly	Ser	Tyr	Ser	Thr	Phe	Gly	Glu
20					85					90						95	
		Arg															

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						5					10					15	
		His	His	Thr	Ala	Tyr	Leu	Val	Phe	Ser	Pro	Ser	Lys	Ser	Phe	Val	His
				20					25						30		
		Leu	Glu	Pro	Met	Ser	His	Glu	Leu	Pro	Cys	Gly	His	Thr	Gln	Thr	Val
40				35				40					45				
		Gln	Ala	His	Tyr	Ile	Leu	Asn	Gly	Gly	Thr	Leu	Leu	Gly	Leu	Lys	Lys
		50				55						60					
		Leu	Ser	Phe	Tyr	Tyr	Leu	Ile	Met	Ala	Lys	Gly	Gly	Ile	Val	Arg	
		65				70					75						

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<212> PRT

50 <213> Homo sapiens

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<400> 21

	1	Ser	Ser	Ser	Asn	Glu	Glu	Val	Met	Phe	Leu	Thr	Val	Gln	Val	Lys	Gly
						5					10					15	
		Pro	Thr	Gln	Glu	Phe	Lys	Lys	Arg	Thr	Thr	Val	Met	Val	Lys	Asn	Glu

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 Asp Ser Leu Val Phe Val Gln Thr Asp Lys Ser Ile Tyr Lys Pro Gly
 35 40 45
 Gln Thr Val Lys
 5 50

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 20 Arg Val Gly Phe Tyr Glu Ser Asp Val Met Gly Arg Gly His Ala Arg
 20 25 30
 Leu Val His Val Glu Glu Pro His Thr Glu Thr Val Arg Lys
 35 40 45

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 1 5 10 15
 Ala Pro Cys Ser Lys Asp Leu Gly Asn Ala
 20 25

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 1 5 10 15
 Glu Lys Phe Ser Gly Gln Leu Asn Ser His Gly Cys Phe Tyr Gln Gln
 20 25 30
 55 Val Lys Thr Lys Val Phe Gln Leu Lys
 35 40

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Ser	Ser	Gly	Ser	Leu	Leu	Asn	Asn	Ala	Ile	Lys	Gly	Gly	Val	Glu	Asp
1				5					10					15	
Glu	Val	Thr	Leu	Ser	Ala	Tyr	Ile	Thr	Ile	Ala	Leu	Leu	Glu	Ile	Pro
			20					25					30		
15	Leu	Thr	Val	Thr	His	Pro	Val	Val	Arg						
			35					40							

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Leu	Cys	Lys	Ser	Ser	Gly	Gln	Trp	Gln	Thr	Pro	Gly	Ala	Thr	Arg	Ser
30	1			5				10						15	
Leu	Ser	Lys	Ala	Val	Cys	Lys	Pro	Val	Arg	Cys	Pro	Ala	Pro	Val	Ser
			20					25					30		
Phe	Glu	Asn	Gly	Ile	Tyr	Thr	Pro	Arg	Leu	Gly	Ser	Tyr	Pro	Val	Gly
		35				40					45				
35	Gly	Asn	Val	Ser	Phe	Glu	Cys	Glu	Asp	Gly	Phe	Ile	Leu	Arg	
	50					55					60				

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Ala	Pro	Arg	Ser	Lys	Val	Pro	Pro	Pro	Arg	Asp	Phe	His	Ile	Asn	Leu
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Phe	Arg	Met	Gln	Pro	Trp	Leu	Arg								
			20												

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10/14

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Leu Ser Lys Ala Val Cys Lys Pro Val Arg Cys Pro Ala Pro Val Ser
20 25 30
10 Phe Glu Asn Gly Ile Tyr Thr Pro Arg Leu Gly Ser Tyr Pro Val Gly
35 40 45
Gly Asn Val Ser Phe Glu Cys Glu Asp Gly Phe Ile Leu Arg
50 55 60

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Phe Gly His Gly Asp Lys Val Arg Tyr Arg Cys Ser Ser Asn Leu Val
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Leu Thr Gly Ser Ser Glu Arg Glu Cys Gln Gly Asn Gly Val Trp Ser
20 25 30
30 Gly Thr Glu Pro Ile Cys Arg
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Ala Pro Ser Thr Trp Leu Thr Ala Tyr Val Val Lys Val Phe Ser Leu
45 1 5 10 15
Ala Val Asn Leu Ile Ala Ile Asp Ser Gln Val Leu Cys Gly Ala Val
20 25 30
Lys Trp Leu Ile Leu Glu Lys Gln Lys Pro Asp Gly Val Phe Gln Glu
35 40 45
50 Asp Ala Pro Val Ile His Gln Glu Met Ile Gly Gly Leu Arg Asn Asn
50 55 60
Asn Glu Lys Asp Met Ala Leu Thr Ala Phe Val Leu Ile Ser Leu Gln
65 70 75 80
Glu Ala Lys

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 Val Lys Glu Tyr Val Leu Pro Ser Phe Glu Val Ile Val Glu Pro Thr
 20 25 30
 Glu Lys Phe Tyr Tyr Ile Tyr Asn Glu Lys Gly Leu Glu Val Thr Ile
 35 40 45
 15 Thr Ala Arg
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 Phe Ser Asp Ala Gly Leu Thr Phe Thr Ser Ser Ser Gly Gln Gln Thr
 20 25 30
 Ala Gln Arg Ala Glu Leu Gln Cys Pro Gln Pro Ala Ala Arg Arg Arg
 35 40 45
 35 Arg Ser Val Gln Leu Thr Glu Lys
 50 55

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 Gly Ile Pro Val Lys Gln Asp Ser Leu Ser Ser Gln Asn Gln Leu Gly
 20 25 30
 Val Leu Pro Leu Ser Trp Asp Ile Pro Glu Leu Val Asn Met Gly Gln
 35 40 45
 55 Trp Lys
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 Arg Ser Glu Glu Thr Lys Glu Asn Glu Gly Phe Thr Val Thr Ala Glu
 20 25 30
 Gly Lys Gly Gln Gly Thr Leu Ser Val Val Thr Met Tyr His Ala Lys
 15 35 40 45

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 1 5 10 15
 30 Asn His Lys Leu Leu Pro Val Gly Arg Thr Val Met Val Asn Ile Glu
 20 25 30
 Asn Pro Glu Gly Ile Pro Val Lys
 35 40

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 Met Thr Gly Phe Ala Pro Asp Thr Asp Asp Leu Lys Gln Leu Ala Asn
 20 25 30
 50 Gly Val Asp Arg Tyr Ile Ser Lys
 35 40

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13/14

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 1 5 10 15
 Ala Glu Glu Asn Cys Phe Ile Gln Lys
 20 25

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Asp Ala Pro Asp His Gln Glu Leu Asn Leu Asp Val Ser Leu Gln Leu
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 Pro Ser Arg Ser Ser Lys Ile Thr His Arg
 20 25

25

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Ile Leu Leu Gln Gly Thr Pro Val Ala Gln Met Thr Glu Asp Ala Val
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 Asp Ala Glu Arg Leu Lys His Leu Ile Val Thr Pro Ser Gly Cys Gly
 40 20 25 30
 Glu Gln Asn Met Ile Gly Met Thr Pro Thr Val Ile Ala Val His Tyr
 35 40 45
 Leu Asp Glu Thr Glu Gln Trp Glu Lys Phe Gly Leu Glu Lys
 50 55 60

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 Trp Glu Asp Pro Gly Lys Gln Leu Tyr Asn Val Glu Ala Thr Ser Tyr

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20 25 30
Ala Leu Leu Ala Leu Leu Gln Leu Lys
35 40

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Met Thr Pro Thr Val Ile Ala Val His Tyr Leu Asp Glu Thr Glu Gln
20 25 30
Trp Glu Lys Phe Gly Leu Glu Lys Arg
35 40

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Ile Arg Ala Tyr Tyr Glu Asn Ser Pro Gln Gln Val Phe Ser Thr Glu
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Phe Glu Val Lys Glu Tyr Val Leu Pro Ser Phe Glu Val Ile Val Glu
20 25 30
Pro Thr Glu Lys
35

40